

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 June 2002 (06.06.2002)

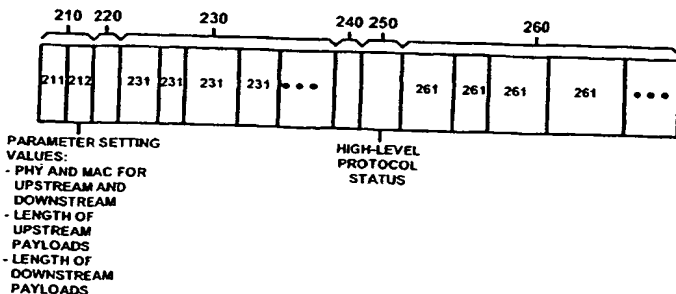
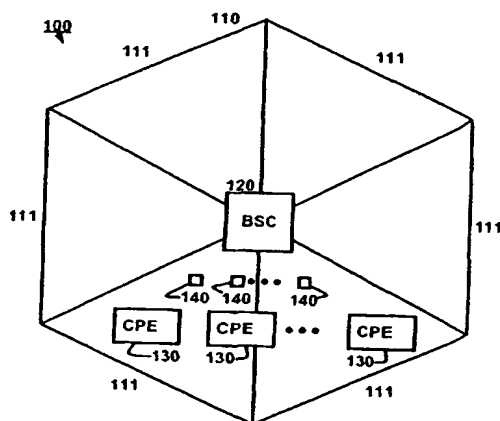
PCT

(10) International Publication Number
WO 02/045330 A3

- (51) International Patent Classification⁷: H04L 1/18, 1/00
- (21) International Application Number: PCT/US01/32037
- (22) International Filing Date: 11 October 2001 (11.10.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/689,271 11 October 2000 (11.10.2000) US
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- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,

[Continued on next page]

(54) Title: AUTOMATIC RETRANSMISSION AND ERROR RECOVERY FOR PACKET ORIENTED POINT-TO-MULTI-POINT COMMUNICATION



(57) Abstract: A wireless communication link is divided into a downstream portion and an upstream portion. Parameters are selected for automatic retransmission independently for the downstream portion and the upstream portion of the wireless communication link. A BSC controls the selection of parameters for automatic retransmission for all CPE within a cell. As part of a TDD frame, the BSC includes its selection of parameters for automatic retransmission to be used by CPE within a control section of the TDD frame. The BSC dynamically and adaptively determines new selected parameters for automatic retransmission, in response to conditions of a wireless communication link with each independent CPE. The BSC dynamically and adaptively allocates acknowledgement time slots within the upstream portion of the TDD frame, for use by each selected CPE. The BSC allocates some portion of the upstream bandwidth as a shared resource and some portion of the upstream bandwidth as unshared when there are messages received but not yet acknowledged.

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CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

(88) Date of publication of the international search report:
29 August 2002

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/32037

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L1/18 H04L1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 22865 A (ERICSSON TELEFON AB L M) 20 April 2000 (2000-04-20) page 1, line 26 -page 2, line 32 page 6, line 20 -page 7, line 33; figure 2 ---	1-8
A	EP 0 794 631 A (KOKUSAI DENSHIN DENWA CO LTD) 10 September 1997 (1997-09-10) abstract page 2, line 19 - line 23 page 2, line 54 -page 3, line 15 page 10, line 46 - line 53 page 12, line 23 - line 25 ---	1-6
X	US 5 684 791 A (RAYCHAUDHURI DIPANKAR ET AL) 4 November 1997 (1997-11-04) column 5, line 54 -column 6, line 24; figure 4 column 9, line 1 - line 8 ---	7-10

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

18 June 2002

Date of mailing of the international search report

01/07/2002

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/32037

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>INOUE M ET AL: "LINK-ADAPTIVE RESOURCE SCHEDULING FOR WIRELESS MESSAGE TRANSPORT" IEEE GLOBECOM 1998. GLOBECOM '98. THE BRIDGE TO GLOBAL INTEGRATION. SYDNEY, NOV. 8 - 12, 1998, IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE, NEW YORK, NY: IEEE, US, vol. 4, 8 November 1998 (1998-11-08), pages 2223-2228, XP000894436 ISBN: 0-7803-4985-7 the whole document</p> <p>-----</p>	<p>7, 8, 10, 11</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0022865	A	20-04-2000	AU 1422100 A CN 1348668 T EP 1114567 A2 WO 0022865 A2	01-05-2000 08-05-2002 11-07-2001 20-04-2000
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